



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/018,208

11/09/2001

Dale Lee Yones

DN1999118USA

4506

7590

08/11/2006

Howard M Cohn
Ronald Yaist Dept 823
The Goodyear Tire & Rubber Company
1144 East Market Street
Akron, OH 44309-3531

EXAMINER

NGUYEN, TU X

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/018,208

Applicant(s)

YONES, DALE LEE

Examiner

Tu X. Nguyen

Art Unit

2618

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

P r i d f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-32 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 25 and 37-42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/09/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 22-24, 26 and 33-36, are rejected under 35 U.S.C. 102(b) as being anticipated by Katzenstein (US Patent 5,245,332).

Regarding claim 22, Katzenstein discloses an RF transponder comprising an antenna system characterized by:

a programmable load (see abstract) connected to the antenna system for transmission modulation (see col.12 lines 1-2).

Regarding claim 23, Katzenstein discloses a plurality of first output stage transistors (see 72, 76, 78 fig.4) connected to a first terminal (see 81, fig.4) of the antenna system;

a corresponding plurality of second output stage transistors (see 72, 76, 78, fig.4) connected to a second terminal (see 83, fig.4) of the antenna system; and

control logic for determining which ones of the first output stage transistors and which ones of the second output stage transistors are used to modulate the antenna system (see col.8 lines 45-59).

Regarding claim 24, Katzenstein discloses an EEPROM storing programmed settings for driving the control logic (see col.13 lines 15-16).

Regarding claim 26, Katzenstein discloses a gate for disconnecting modulation of the antenna system in response to a reset signal (see col.10 lines 64).

Regarding claim 33, Katzenstein discloses an RF transponder comprising:
an antenna system (see 22, fig.4); and
circuitry for applying modulation to an RF signal received by the antenna system
characterized by:

- a modulation load connected to the antenna system (see col.12 lines 1-2);
- a control logic for controlling the modulation load (see 84, fig.4);
- a first gate providing a control signal to the control logic, wherein the first gate logically combines a system clock signal and data stream (see col.8 lines 21-31);
- a sync delay circuit for delaying the system clock signal in order to synchronize the system clock signal with the data stream (see col.8 lines 1-20).

Regarding claim 34, Katzenstein discloses a second gate interposed between the first gate and the control logic for disconnecting modulation of the antenna system in response to a reset signal (see col.10 lines 64).

Regarding claim 35, Katzenstein discloses a method for controlling RF signal modulation in a passive transponder (see col.11 lines 55-56) which comprises an antenna system (see 22, fig.4), circuitry for applying modulation (see col.12 lines 1-2) to an RF signal received by the antenna system, and circuitry for deriving transponder power from the received RF signal, characterized by:

providing a modulation load connected to the antenna system and modulated under control of a control signal formed by logically combining a system clock signal and a data stream (see col.8 lines 1-45); and

delaying the system clock signal in order to synchronize the system clock signal with the data stream (see col.8 lines 1-45).

Regarding claim 36, Katzenstein discloses forming a phase-shift key type of control signal, for producing phase-shift keyed modulation of the RF signal received by the antenna system (see col.8 lines 1-20).

Allowable Subject Matter

3. Claims 27-32 are allowed.
4. Claims 25 and 37-42, objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 27 and 25, the prior arts fail to teach "a power supply and level shifters connected to the load, wherein voltage changes of the power supply dynamically vary the magnitude of the load according to power available in the transponder", as cited in the claim.

Regarding dependent claim 37, the prior arts fail to teach "the phase-shift control signal uses a system clock signal having half the frequency of the RF signal received by the antenna system; and the data stream is a signal clocked at a fraction of the frequency of the RF signal received by the antenna system", as cited in the claim.

Art Unit: 2618

Regarding dependent claim 39, the prior arts fail to teach "optimizing RF signal modulation performance by utilizing a modulation index having a magnitude which is adjusted according to programmed trim settings stored in the transponder", as cited in the claim.

Regarding dependent claim 41, the prior arts fail to teach " a modulation index having a magnitude which is adjusted dynamically in proportion to a power of the RF signal received by the antenna system", as cited in the claim.

Regarding dependent claim 42, the prior arts fail to teach "preventing RF signal modulation if the power derived from the RF signal received by the antenna system is too low to provide transponder power adequate for stable transponder operation including RF signal modulation", as cited in the claim.

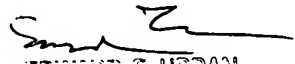
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed Tu Nguyen whose telephone number is 571-272-7883. The examiner can normally be reached on Monday through Friday from 6:30AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 24, 2006


EDWARD F. URBAN
SUPERVISOR / PATENT EXAMINER
TECHNOLOGY CENTER 2300